armature body provided with at least two permanent magnetic magnet parts arranged axially one behind the other and having opposite magnetization. Each of the at least two magnet parts having a magnet axial extension dimension. The armature body being set in axially oscillating motion by the magnetic field of the excitation winding in the axial gap. Each of the multiple limbs of the main yoke body having a pole surface facing the armature body and defining a pole surface width dimension extending across the axial width of the pole surface. The pole surface width dimension of each of the multiple limbs being substantially the same. Each of the multiple limbs being spaced apart from one another axially by a pole surface spacing dimension. The magnet axial extension dimension of each magnet part being approximately equal to the sum of the pole surface width dimension and the pole surface spacing dimension.

Conventional yokes for linear drive devices have been kinked on a side facing the armature. Such conventional yokes are expensive to produce and it is difficult to arrange the windings in the windows of such conventional yokes.

In stark contrast, an exemplary embodiment of the present invention includes a pole surface width dimension of each of the multiple limbs being substantially the same, each of the multiple limbs being spaced apart from one another axially by a pole surface spacing dimension, the magnet axial extension dimension of each magnet part being approximately equal to the sum of the pole surface width dimension and the pole surface spacing dimension. In this manner, the yoke structure is greatly simplified.

The JP2000-253640 Reference

The Office Action rejects claims 14 and 18-20 under 35 U.S.C. § 102(b) as allegedly being unpatentable over the JP2000-253640 reference. Applicant respectfully traverses this rejection.

None of the applied references teaches or suggests the features of the claimed invention including: 1) a pole surface width dimension of each of the multiple limbs being substantially the same, each of the multiple limbs being spaced apart from one another axially by a pole surface spacing dimension, the magnet axial extension

dimension of each magnet part being approximately equal to the sum of the pole surface width dimension and the pole surface spacing dimension as recited by independent claim 14; and 2) the pole surface width dimension of at least one pole surface is substantially the same as the stroke distance of the armature body during the oscillating movement as recited by claim 19. As explained above, these features are important for simplifying the yoke structure and thereby making it less expensive to manufacture and easier to install the windings.

Indeed, the Office Action does not allege that the JP2000-253640 reference teaches or suggests the pole surface width dimension of at least one pole surface is substantially the same as the stroke distance of the armature body during the oscillating movement as recited by claim 19.

Applicant respectfully requests withdrawal of this rejection.

The JP2000-224829 Reference

The Office Action rejects claims 14 and 17-20 under 35 U.S.C. § 102(b) as allegedly being unpatentable over the JP2000-224829 reference. Applicant respectfully traverses this rejection.

None of the applied references teaches or suggests the features of the claimed invention including: 1) a pole surface width dimension of each of the multiple limbs being substantially the same, each of the multiple limbs being spaced apart from one another axially by a pole surface spacing dimension, the magnet axial extension dimension of each magnet part being approximately equal to the sum of the pole surface width dimension and the pole surface spacing dimension as recited by independent claim 14; and 2) the counter-yoke body includes counter limbs having axial width dimensions at pole surfaces corresponding to the limbs of the main yoke body as recited by claim 17. As explained above, this feature is important for simplifying the yoke structure and thereby making it less expensive to manufacture and easier to install the windings.

Indeed, the Office Action does not allege that the JP2000-224829 reference teaches or suggests the counter-yoke body includes counter limbs having axial width

dimensions at pole surfaces corresponding to the limbs of the main yoke body as recited by claim 17.

Applicant respectfully requests withdrawal of this rejection.

The JP2000-253640 Reference in view of the Huth reference

The Office Action rejects claims 15 and 16 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the JP2000-253640 reference in view of the Huth reference. Applicant respectfully traverses this rejection.

None of the applied references teaches or suggests the features of the claimed invention including a pole surface width dimension of each of the multiple limbs being substantially the same, each of the multiple limbs being spaced apart from one another axially by a pole surface spacing dimension, the magnet axial extension dimension of each magnet part being approximately equal to the sum of the pole surface width dimension and the pole surface spacing dimension as recited by independent claim 14. This feature is important for simplifying the yoke structure and thereby making it less expensive to manufacture and easier to install the windings.

As explained above, the JP2000-253640 reference does not teach or suggest these features.

The Huth reference does not remedy the deficiencies of the JP2000-253640 reference.

The Office Action appears to suggest that it would have been obvious to one of ordinary skill in the art to provide the pole shoes that are disclosed by the Huth reference to the limbs of the JP2000-253640 reference. The Office Action makes the conclusory statement that such would have been obvious because "these two pole structures were art-recognized equivalents." Applicant respectfully submits that such a conclusory statement is insufficient to provide a *prima facie* case for obviousness because the Office Action fails to provide an adequate rationale for combining the prior art as required by KSR International v. Teleflex Inc. 82 U.S.P.Q. 2d 1385 (2007).

> "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness." (*In re Kahn,* 441 F.3d 977, 988 (CA Fed. 2006) cited with approval in KSR).

The Office Action simply provides absolutely no hint of any articulated reasoning with any rationale underpinning to support a legal conclusion of obviousness. As such, the Office Action fails to present a *prima facie* case for obviousness.

The Office Action has provide no articulated reasoning to combine the teachings and suggestions of the Huth reference with the JP2000-253640 reference to arrive at the claimed invention, except from using Applicant's invention as a template through hindsight reconstruction of Applicant's claims.

Moreover, Applicant respectfully submits that one of ordinary skill in the art would not have combined the teachings of the Huth reference with the JP2000-253640 reference. The references are directed to completely different and unrelated problems.

One of ordinary skill in the art who was concerned with the problems with which the Huth reference is concerned with solving would not have referred to the JP2000-253640 reference, and vice-versa, because the JP2000-253640 reference is concerned with completely different and unrelated problems. Thus, these references would not have been combined.

Applicant respectfully requests withdrawal of this rejection.

The JP2000-253640 Reference in view of the McGill et al. reference

The Office Action rejects claims 21 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the JP2000-253640 reference in view of the McGill et al. reference. Applicant respectfully traverses this rejection.

None of the applied references teaches or suggests the features of the claimed invention including a pole surface width dimension of each of the multiple limbs being substantially the same, each of the multiple limbs being spaced apart from one another

axially by a pole surface spacing dimension, the magnet axial extension dimension of each magnet part being approximately equal to the sum of the pole surface width dimension and the pole surface spacing dimension as recited by independent claim 14. This feature is important for simplifying the yoke structure and thereby making it less expensive to manufacture and easier to install the windings.

As explained above, the JP2000-253640 reference does not teach or suggest these features.

The McGill et al. reference does not remedy the deficiencies of the JP2000-253640 reference.

The Office Action appears to suggest that it would have been obvious to one of ordinary skill in the art to provide the pole shoes that are disclosed by the McGill et al. reference to the limbs of the JP2000-253640 reference. The Office Action makes the conclusory statement that such would have been obvious because "these two pole structures were art-recognized equivalents." Applicant respectfully submits that such a conclusory statement is insufficient to provide a *prima facie* case for obviousness because the Office Action fails to provide an adequate rationale for combining the prior art as required by KSR International v. Teleflex Inc. 82 U.S.P.Q. 2d 1385 (2007).

> "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness." (*In re Kahn,* 441 F.3d 977, 988 (CA Fed. 2006) cited with approval in KSR).

The Office Action simply provides absolutely no hint of any articulated reasoning with any rationale underpinning to support a legal conclusion of obviousness. As such, the Office Action fails to present a *prima facie* case for obviousness.

The Office Action has provide no articulated reasoning to combine the teachings and suggestions of the McGill et al. reference with the JP2000-253640 reference to arrive at the claimed invention, except from using Applicant's invention as a template through hindsight reconstruction of Applicant's claims.

Moreover, Applicant respectfully submits that one of ordinary skill in the art would not have combined the teachings of the McGill et al. reference with the JP2000-253640 reference. The references are directed to completely different and unrelated problems.

One of ordinary skill in the art who was concerned with the problems with which the McGill et al. reference is concerned with solving would not have referred to the JP2000-253640 reference, and vice-versa, because the JP2000-253640 reference is concerned with completely different and unrelated problems. Thus, these references would not have been combined.

Applicant respectfully requests withdrawal of this rejection.

CONCLUSION

In view of the above, entry of the present Amendment and allowance of Claims 14-31 are respectfully requested. If the Examiner has any questions regarding this amendment, the Examiner is requested to contact the undersigned. If an extension of time for this paper is required, petition for extension is herewith made.

Respectfully submitted,

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